Serial No.: 10/656,465 - 3 -

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Previously Presented) Flexible dental polymer film for coating tooth surfaces, comprising a non fiber-reinforced flexible solid polymer film layer having a continuous polymer network which comprises polymerisable groups capable of further polymerization with the film in an amount sufficient to cure the flexible film, which flexible film can be shaped around a tooth and cured by polymerization to coat a surface thereof.
- 2. (Previously Presented) Dental polymer film according to claim 1, wherein at least one of the polymerisable groups is an acrylate or methacrylate group.
- 3. (Previously Presented) Dental polymer film according to claim 1, wherein the film contains polyurethanes, Michael addition resins or other polyadducts.
- 4. (Previously Presented) Dental polymer film according to claim 1, wherein at least a part of the polymerisable groups is radically polymerisable.
- 5. (Previously Presented) Dental polymer film according to claim 1, wherein at least a part of the polymerisable groups is cationically polymerisable.
- 6. (Previously Presented) Dental polymer film according to claim 1, further comprising an initiator for the thermal, photochemical or redox-induced polymerisation of the polymerisable groups.
- 7. (Previously Presented) Dental polymer film according to claim 6, wherein the initiator is in micro-encapsulated form.

- 8. (Previously Presented) Dental polymer film according to claim 1, which further comprises organic or inorganic fillers.
- 9. (Previously Presented) Dental polymer film according to claim 1, which further comprises one or more polymerisation inhibitors.
- 10. (Previously Presented) Dental polymer film according to claim 1, which further comprises one or more antioxidants.
- 11. (Previously Presented) Dental polymer film according to claim 1, which further comprises one or more dyes and/or pigments.
- 12. (Previously Presented) Dental polymer film according to claim 1, which further comprises a primer.
- 13. (Previously Presented) Dental polymer film according to claim 1, wherein when the polymer film having two sides is shaped around a tooth surface the side of the polymer film facing the tooth surface is coated with a primer for the adhesion to the tooth surface.
- 14. (Previously Presented) Dental polymer film according to claim 1, which further comprises an anti-adhesive additive.
- 15. (Previously Presented) Dental polymer film according to claim 1, wherein when the polymer film having two sides is shaped around a tooth surface the side of the polymer film facing away from the tooth surface is coated with an anti-adhesive additive to prevent accumulation of plaque.
- 16. (Previously Presented) Dental polymer film according to claim 1, which further comprises one or more active substances, antimicrobial compounds, or antibiotics.

- 17. (Previously Presented) Dental polymer film according to claim 1, which is detachably held on a carrier film.
- 18. (Original) Dental polymer film according to claim 17, wherein the carrier film is in the form of an inflatable film bag.
- 19. (Previously Presented) Dental polymer film according to claim 17, wherein the carrier film is translucent.

20-23. (Canceled)

24. (Previously Presented) Kit comprising a dental polymer film according to claim 1 for sealing and mechanical protection of the tooth surface and an adhesive for fixing the polymer film to the tooth surface.

25-26. (Canceled)

27. (New) Flexible dental polymer file for coating tooth surfaces, comprising a non fiber-reinforced flexible solid polymer film layer having a continuous addition polymer network which comprises radically polymerizable acrylate or methacrylate groups capable of further polymerization with the film in an amount sufficient to cure the flexible film, which flexible film can be shaped around a tooth and cured by polymerization to coat a surface thereof.